National Aeronautics and Space Administration

MARSHALL STAR

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June 4, 2009

NASA managers meet to set Endeavour launch date

From combined reports

An agency review of preparations for space shuttle Endeavour's mission to the International Space Station was under way June 3 at "Marshall Star" press time. The launch date will be announced at the conclusion of the review. The targeted launch date is June 13.

The flight readiness review is a traditional meeting during which top NASA and contractor managers set launch dates; determine whether the shuttle's complex array of equipment, support systems and procedures are ready for flight; and assess any risks associated with the mission.

"The propulsion elements are ready to propel shuttle Endeavour to orbit," said Steve Cash, manager of the Space Shuttle Propulsion Office at the Marshall Space Flight Center. Cash and his team manage the space shuttle main engines, the external tank and the reusable solid rocket boosters.

Shuttle Endeavour's STS-127 flight will deliver the final components of the Japan Aerospace Exploration Agency's Kibo laboratory to the space station. The 16-day mission will include five spacewalks and the installation of two platforms outside the Japanese module. One platform is permanent and will serve as a type of porch for experiments that require direct exposure to the space environment. The other is an experiment storage palette that will be detached and returned with shuttle Endeavour.

The STS-127 crew, from left: Pilot Doug Hurley and Commander Mark Polansky. Back row, from left: Dave Wolf; Christopher Cassidy; the Canadian Space Agency's Julie Payette; Tom Marshburn; and Tim Kopra, all mission specialists.

During the mission, Kibo's robotic arm will exchange three experiments from the palette to the platform. Future

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Building 4601 ribbon-cutting ceremony to be held June 8

The newly constructed Building 4601 will be welcomed to the Marshall Space Flight Center neighborhood with a ribbon-cutting ceremony at 8:30 a.m. June 8.

The building is part of the 4600 engineering complex at the intersection of Martin and Rideout roads. The new facility will be home to engineers in Marshall's Materials and Processes Laboratory and Spacecraft and Vehicle Systems Department. It was designed and built according to efficient energy and water principles, making it eligible for registration with the U.S. Green Building Council for Leadership in Energy and Environmental Design, or LEED® — a voluntary, consensus-based national standard for developing high-performance, sustainable structures. The Marshall Center will submit the new facility for certification later this year.

The center earned LEED® Silver Certification for Building 4600, the first facility in the new complex, which opened in 2005. It was the first LEED® building constructed by NASA.

Marshall Resident Office at Kennedy

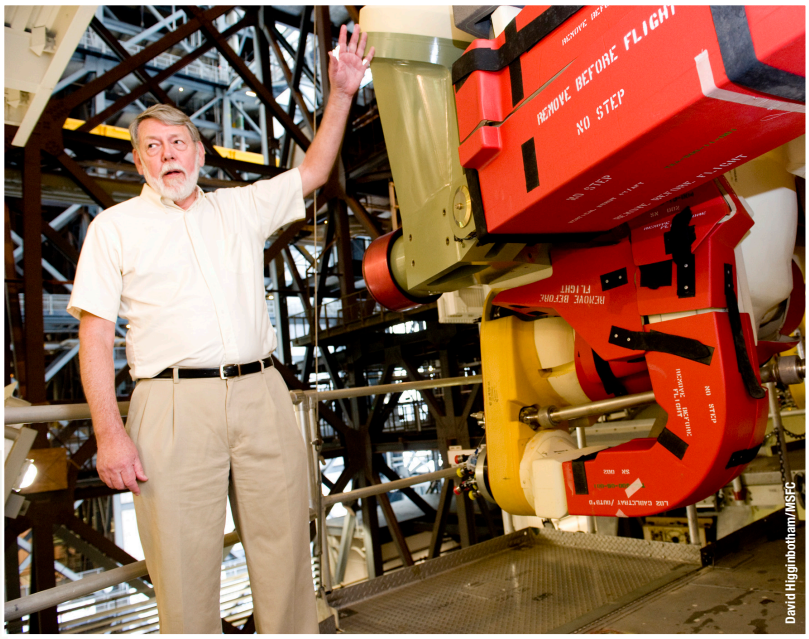
Connecting 'mother ship' to shuttle launch

By Lori Meggs

Ever since the first space shuttle launch of STS-1, the Marshall Resident Office at the Kennedy Space Center, Fla., has been a vital part of preparing NASA's shuttle fleet for launch.

For 31 years, the Marshall Resident Office team at Kennedy has served as an extended family from Marshall Space Flight Center's Shuttle Propulsion Office – overseeing everything from propulsion element data prior to launch to retrieval and refurbishment of the solid rocket boosters.

The Resident Office is "home" to about 90 Marshall Center civil service and contractor employees. The team monitors all processing and launch-related issues for propulsion systems managed by Marshall: space shuttle main engines, external tank, solid rocket motors and solid rocket boosters.



John Key, a founding member of Marshall's Resident Office at Kennedy and the external tank representative, shows where the tank attaches to a space shuttle during hardware integration in Kennedy's Vehicle Assembly Building.

Linda Clark and Roy Worthy of the Resident Office inspect solid rocket booster hardware in the Vehicle Assembly Building. They perform element engineering "walk-downs" to assess, document or correct hardware design issues prior to integration of the boosters with other major shuttle elements.

"The Resident Office team members are our eyes and ears at the Cape," said Jody Singer, deputy manager of Marshall's Shuttle Propulsion Office. "They have the best understanding of what's going on to expedite launch processing and help us here at Marshall support flight readiness."

The team tracks the assembly and testing of the propulsion hardware up until launch, and helps in the resolution of any issue that may arise. If deviations from hardware designs are discovered, or production errors are detected, the team's expertise can help with a resolution to maintain launch schedules and ensure shuttle elements are safe to fly.

"We are here to provide anything the Marshall family needs," said Jolene Martin, manager of the Resident Office – "from expertise on designs of shuttle propulsion elements, to setting up tours and getting everyone the proper credentials when they visit."

The Resident Office was established to put Marshall employees onsite as liaisons to shuttle propulsion contractors and serve as ambassadors to the Kennedy Space Center. "Having Marshall team

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members at Kennedy give approvals and concurrences for shuttle hardware is essential to every launch," added Martin, who has led the office since June 2006.

While other NASA centers have offices onsite at Kennedy, Marshall's is unique due to the actual hands-on involvement in hardware processing.

Office team members participate in tests, simulations and launches from the Engineering Support Area – part of launch room 2 in the Launch Control Center where they monitor up-to-the-second propulsion element data. They also work with other Kennedy organizations, including ground operations, launch services and launch integration, to give Space Shuttle Program managers information they need to give a final "go" for launch.


David Higginbotham/MSFC

Jolene Martin, manager of Marshall's Resident Office at Kennedy, discusses an external tank design issue with John Chapman, Marshall's External Tank Project manager.

"The team's efforts at Kennedy – day in and day out – are immeasurable to our Shuttle Propulsion Office and to shuttle safety," said Singer. "They also are motivators, strengthening relationships and helping with community outreach to show Marshall's role in space exploration."

Following a launch, Resident Office team members assist with post-launch retrieval of the solid rocket boosters, and in the post-flight assessment and disassembly operations. At the Solid Rocket Booster Assembly and Refurbishment Facility at Kennedy, the Resident Office team begins the process of readying the boosters for their next flight. Here, the team

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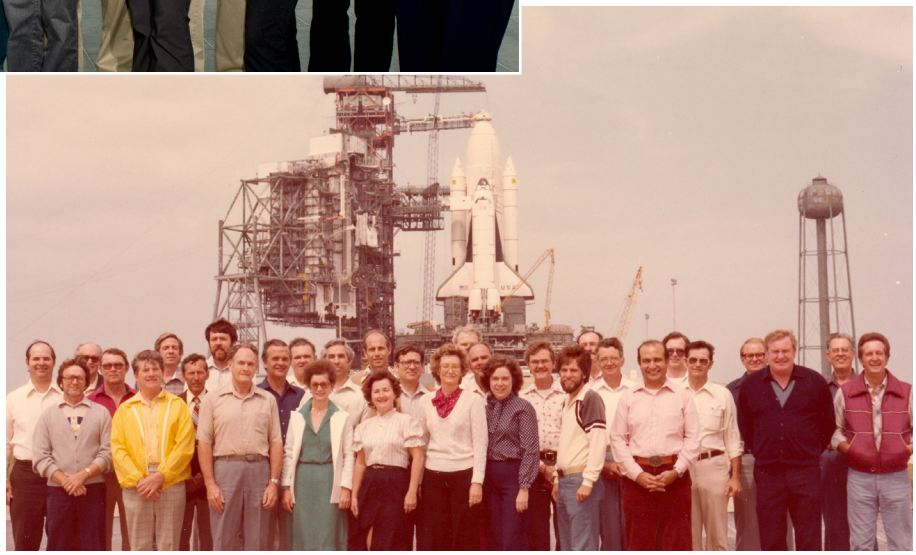
David Higginbotham/MSFC

Tony Smith, center, deputy manager of Marshall's Resident Office at Kennedy, talks with ATK Launch Systems and United Space Alliance contractors about the installation of Ares I-X flight hardware.

David Higginbotham/MSFC

Diane Fleming, an administrative operations specialist in the Resident Office, coordinates Kennedy badging, training and clearance requirements for the Marshall team and visitors, and bus transport during shuttle launches.

The Marshall Resident Office team includes, from left, Alex Alvarado, Linda Clark, Wendy Snooks, Roy Worthy, Sandy Saville, Tony Smith, Jolene Martin, Daniel D'Agostino, Jaime McMillon, John Key, Bethany March, Sharon Feagan and Diane Fleming.



The first employees of Marshall's Resident Office at Kennedy at launch pad 39A in 1981 prior to space shuttle Columbia's launch.

Jaime McMillon, a Resident Office engineer, supports shuttle propulsion elements during launch and ground processing, and provides updates to Marshall teams.

Resident Office

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manufactures booster components and prepares them for integration with other major elements of the shuttle flight vehicle.

While the Resident Office continues its commitment to the shuttle, it's also supporting the upcoming launch of Ares I-X – the first flight test for the Ares I rocket, the agency's next-generation spacecraft and crew launch vehicle system. The flight will provide NASA an early opportunity to test and prove hardware, analysis models, facilities and ground operations associated with Ares I. "Life at the launch site is at a peak of activity and enthusiasm," said Tony Smith, deputy manager of the Resident Office. "With the buildup of the new, one-of-a-kind Ares I-X test flight hardware, there's never a dull moment."

"It's an exciting time for us," Martin added. "We just want to carry on the tradition of excellence established by this office in our future spaceflight endeavors."

Meggs, an AI Signal Research Inc. employee, supports the Office of Strategic Analysis & Communications.

Marshall Medical Center: Become familiar with an AED

In recognition of National Cardiopulmonary Resuscitation and Automated External Defibrillator Awareness week, June 1-7, the Marshall Space Flight Center Medical Center encourages team members to reacquaint themselves with the location and proper use of automated external defibrillators, or AEDs, stored across the center.

Numerous Marshall Center team members have completed CPR and AED training and can assist in the event of a cardiac emergency. The names of trained personnel in each building are displayed on its bulletin boards and on the defibrillator cabinets, which are marked "AED."

Team members also are reminded that the alarm that sounds when defibrillator cabinets are opened is a local alarm only. It does not notify the 911 center. Personnel responding to an emergency should direct another team member to call 911. For more information on Marshall's AED Program, please contact the Medical Center at 544-2390 or paramedic Tony Ceci at 544-5651.

To learn more about the defibrillators, visit http://marshallstar.msfc.nasa.gov/3-19-09.pdf, page 2.

Classified Ads

To submit a classified ad to the Marshall Star, go to Inside Marshall, to "Employee Resources," and click on "Employee Ads — Submit Ad." Ads are limited to 15 words, including contact numbers. No sales pitches. Deadline for the next issue, June 11, is 4:30 p.m. Thursday, June 4.

Miscellaneous

Boxer, 1-year-old male, fawn, white markings. 420-8101

InSinkErator garbage disposal, 1/2 HP, $45; lined drapes, dark green, for five windows, $75. 520-7797

Pedestal oak dining room table, leaf, six chairs, $350. 776-47399

Four used Mud King XT tires, 35x12.5x15, over 60 read, $475. 656-8054

Ethan Allen British Classics buffet, dark distressed finish, $975 obo. 585-3178

Bookcases, tall maple laminate, $50, solid oak CD/DVD, $35; Epiphone Dot electric guitar, $300. 468-8136

Large Scandinavian teak dining table, four chairs, will accommodate up to eight chairs extended. 508-4379

Running boards for a Ford Escape or Ford truck. 771-3154

AKC Labrador puppies, 8 weeks old, yellow/black males, shots, wormed, block head, $300 each. 426-9982

Bunk beds, full size on bottom, $350; pine dresser, $175. 828-5289

Men's LRG jeans, size 38, tags still on them, $30. 337-9222

Young goats, dual purpose, meat, dairy or breeding, approximately 8 months old, $50 each. 828-9494

Six-piece bedroom set, light-color wood, headboard, armoire, two nightstands, dresser, mirror, pics available, $200. 509-2536

Lane five-piece dark brown leather sectional sofa, chaise lounge, $1,800. 348-8316

Large corner computer desk, $40; older HP computer, monitor, speakers, mouse, keyboard, $15. 858-5552

Kenmore washer, XL capacity, $75; Queen Serta box spring mattress, low-profile, $100. 837-6228

Dining/kitchen table, light maple, four matching chairs, wood/beige cushion, pics available, $175. 348-2142

Vehicles

2008 Polaris Ranger RZR side-by-side four wheeler, low hours, $7,900. 200-0687

2008 Camry LE, tan/tan, moonroof, alloy wheels, 21k miles, $17,800. 541-0627

2007 Sidney Outback 28' Fifth Wheel camper, $20,500. 679-2410

2006 Jetta Diesel, five speed, new tires, 77k miles, $15,000. 931-993-7768

2005 Honda Element EX, five speed, 73k miles, $11,500. 278-1974

2005 Chevy Tahoe LT, silver, loaded, DVD, 84k miles, $16,000. 565-9918

2004 R-Vision Motorhome, 33' Class-A, workhorse chassis, extended warranty, $55,000. www.thewillettfamily.com/rv. 883-7021

2002 Prowler 305S fifth wheel, slide out, sleeps eight, $12,900. 721-1260

2001 BMW 330Ci convertible, silver/red, automatic, 53k miles, $15,000. 652-5575

2001 Chrysler Concorde LXI, 22 MPG, maroon, 115k miles, $5,000. 828-4251

2000 Mitsubishi Galant, not drivable, crumpled hood/fender, 2.4L, auto, a/c, 159k miles, $500. 348-9381

1997 Porsche Boxster convertible, five speed, black, high miles, $9,000 obo. 837-2162

1996 Subaru Legacy, a/c, no reverse, leaks oil, $500. 975-9480

1988 Goldwing 1500, dark blue, AM/FM cassette, intercom, new tires/windshield, 34k miles, $5,000. 655-5241

Wanted

Used Bowflex machine in good condition. 843-513-7939

Games for Nintendo DS. 777-8229

Houses/offices to clean, available evenings and weekends, leave message. 777-8595

Corian counter top material, any color/size, scraps etc. 572-7396

Power tower fitness equipment. 776-7399

FAA Inspection Authorization needed for annuals/maintenance on Cessna 210M hangered at Huntsville airport. 832-928-6066

Lost

Pair of brown half-rimmed reading glasses, May 21, Building 4200, Room 211. 544-4680

Ladies gold watch, diamonds around the face of the clock. 682-5004

Space shuttle Atlantis catches a ride home

Space shuttle Atlantis is back home at the Kennedy Space Center, Fla., after a two-day, cross-country ferry flight from Edwards Air Force Base, Calif. Atlantis, atop a modified Boeing 747 jumbo jet, touched down at Kennedy on June 2, after several consecutive days of rain prevented a Florida landing.

The piggybacked aircraft left Edwards on June 1 and landed at Biggs Airfield near El Paso, Texas, where it remained overnight. It also made refueling stops at Lackland Air Force Base near San Antonio, Texas, and Columbus Air Force Base, Miss., on June 2.

Marshall Space Flight Center public affairs officer Dan Kanigan accompanied the ferry flight and wrote about his experience on his blog that can be found at http://blogs.nasa.gov/cm/blog/shuttleferry.

Atlantis is caught in an overhead view atop its 747 carrier as the craft flew over California's high desert June 1.

STS-127 *Continued from page 1*

experiments also can be transferred to the platform from the inside, using the laboratory's airlock.

Mark Polansky will command the STS-127 mission. Douglas Hurley will serve as the pilot. Mission specialists will be Christopher Cassidy, Thomas Marshburn, David Wolf and Julie Payette, a Canadian Space Agency astronaut.

Astronaut Timothy Kopra will catch a ride on Endeavour to become a resident on the space station, serving as a flight engineer and science officer. Japanese astronaut Koichi Wakata will return to Earth with the STS-127 crew, after spending more than three months aboard the space station. Hurley, Cassidy, Marshburn and Kopra will be making their first trips to space.

STS-127 is the 29th shuttle mission to the International Space Station.

For more information about the STS-127 mission, visit http://www.nasa.gov/mission_pages/shuttle/shuttlemissions/sts127/.

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